



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,297	01/03/2006	Atsushi Tanno	OGW-0412	1332

7590 08/02/2007
Patrick G. Burns - Greer, Burns & Crain, Ltd.
Suite 2500
300 South Wacker Drive
Chicago, IL 60606

EXAMINER

FISCHER, JUSTIN R

ART UNIT	PAPER NUMBER
----------	--------------

1733

MAIL DATE	DELIVERY MODE
-----------	---------------

08/02/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/563,297	Applicant(s) TANNO ET AL.	
	Examiner Justin R. Fischer	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☒ Claim(s) 9-11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>010306</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4 and 6 are rejected under 35 U.S.C. 102(b) as anticipated by Yukawa (EP 1,253,025). As best depicted in Figures 1-5, Yukawa discloses a pneumatic tire construction including a noise dampening assembly 5, wherein said assembly is adhesively bonded to the tire inner side (Paragraph 19). In this instance, the claims do not distinguish the adhesive layer of Yukawa from the claimed “elastic fixing band”. Yukawa further teaches that the noise dampening assembly comprises a porous material having an apparent density between 5 and 60 kg/m³ (Paragraph 11).

Regarding claim 2, the noise dampening assembly can be disposed over the entire circumferential extent of the tire.

With respect to claim 3, the innermost surface of said noise dampening assembly is formed with an uneven surface having step heights of at least 5 mm (Paragraph 32).

As to claims 4, 6, and 8, the noise dampening assembly of Yukawa can be formed of multiple layers (Paragraph 24). For example, Figure 2 includes an innermost layer (with respect to tire cavity) or second porous material 5B and an outermost layer or first porous layer 5A. Given the extreme similarities between the porosity and the materials, one of ordinary skill in the art at the time of the invention would have

Art Unit: 1733

expected the porous layers of Yukawa to demonstrate the claimed sound coefficient.

Lastly, with respect to claim 8, Yukawa (Paragraph 24) teaches a multi-layered assembly comprising "plural layers"- such a disclosure encompasses an assembly formed of three layers.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yukawa. As detailed above, Yukawa substantially teaches the claimed tire construction, including a noise dampening assembly formed of a porous material having an apparent density between 5 and 60 kg/m³. With respect to the elastic band, the adhesive layer of Yukawa is seen to satisfy the claimed invention. In the event that such an applied adhesive does not satisfy the claimed invention, it is well known to form such adhesive layers as preforms or tapes (as opposed to being applied or coated in liquid form) which can be viewed as elastic fixing bands. It is suggested that applicant amend the claims to structurally define the elastic fixing band and distinguish it from the adhesive layer of Yukawa.

As to claims 5, 7, and 8, the reference further teaches, as depicted in Figure 2, the use of a multi-layered assembly. As to the thickness of the assembly, the reference teaches a thickness between 3 mm and 80 percent of the height of the tire cavity

Art Unit: 1733

(Paragraph 23). Given this broad range, one of ordinary skill in the art at the time of the invention would have found it obvious to form a multi-layered assembly having the claimed thickness, there being no conclusive showing of unexpected results to establish a criticality for the claimed assembly.

Regarding claim 8, Yukawa teaches a multi-layered assembly comprising "plural layers". While the reference only expressly depicts a two-layered assembly, a fair reading of Yukawa suggests a plurality of embodiments in which more than two layers are included. As such, one of ordinary skill in the art at the time of the invention would have found it obvious to form the assembly of Yukawa from three layers, there being no conclusive showing of unexpected results to establish a criticality for such an assembly.

Allowable Subject Matter

5. Claims 9-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

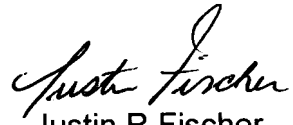
Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R. Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1733

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Justin R Fischer
Primary Examiner
Art Unit 1733

JRF
July 24, 2007